CROSS-HUDSON BRIDGE AND TUNNEL GET NEW IMPETUS

Both Mean Great Saving of Time When Present Traffic Delays Are Gone

The matter of bridge and vehicular tunnel connections between New York and New Jersey has taken form of late as a serious and feasible plan. It must be confessed that some years ago when the suggestion first was made and the Legislatures of both States appointed commissions to consider plans it did look like a dream rather than a possibility. However, since the Hudson has been tunnelled for the railroad system the vehicular tunnel looks more like an actuality.

There is great need of both the cross Hudson bridge and tunnel, although their construction will mean a total expense of \$32,000,000. An enormous amount of goods is carried annually acress the river by The matter of bridge and vehicular tun- two tracks for elevated trains, two tracks

alons to consider plans it did look like a dream rather than a possibility. However, since the Hudson has been tunnelled for the railroad system the véhicular tunnel looks more like an actuality.

There is great need of both the cross Hudson bridge and tunnel, although their construction will mean a total expense of \$53,000,000. An enormous amount of goods a carried annually access the sixes by \$53,000,000. An enormous amount of goods of carried annually across the river by ferrybcats and in lighters, subject to manifold delays and needing to be transshipped by means of several loadings in the course of being delivered. When there a heavy rush of traffic the ferryboats quickly fill up and late comers are held up. In bad weather the boats are subject to delay. Anyway, the tendency is to cut down service on the boats. This is where the motor vehicle user is

interested. The tunnel and the bridge will mean a direct run from the point of de-parture to the destination, a saving in time and in handling. This also means

much to the consumer, because more expeditious methods mean lower costs.

It is not alone to the business man that the bridge and tunnel project is important. The bridge will mean a readier access to parts of New Jersey where living is cheaper and will afford an outlet to a crowded population, which every year. crowded population, which every year sees growing denser on Manhattan Isl-and. So, too, many Jerseymen will find it easier to get into New York and will ore readily enter that attractive market.

more readily enter that attractive market. Both communities will benefit.
At the Automobile Club of America last Wednesday there was detailed discussion of the bridge and tunnel plan. George H. Duck, president of the Motor Truck Club of America, introduced the speakers, who included Senator Martin Saxe of New York, Senator J. A. C. Johnson of New Jersey, Henry W. Hodge of Boller, Hodge & Baird, bridge engineers, and J. D. Snyder of Jacobs & Davies, tunnel engineers.

the past seven years," sa'd Senator Saxe, "the commissions of the two States have carefully studied the proposi-tion and concluded that the desirable solution is a vehicular tunnel in the neighborhood of Canal street, running to Henderson street, Jersey City, and a highway bridge in the neighborhood of Fifty-seventh street. The tunnel is estimated by the engineers to cost \$11,000,000. Practically all questions relating to both entering the street. cally all questions relating to both enter-prises have been solved with the excep-tion of finance.

"In New Jersey legislation is now pend-"In New Jersey legislation is now pending which will permit two or more counties to join together and bond themselves for the purpose of providing one-half of the funds. In New York a constitutional amendment has been introduced providing for the creation of a State debt of \$25,000,000. In view of the fact that the highway system of the State is practically ighway system of the State is practically

ne time to come the finances of the city will be such that the municipality cannot undertake the expense of this kreat public work. The New York commission shortly expects to enter upon a series of conferences with the Board of Estimate and Apportionment of the city of New York in the hope that something practical may be worked out for submission to the

may be worked out for submission to the next Legislature.

"The bridge," said Mr. Hodge in outlining that branch of the enterprise, "will be the greatest artery of traffic coming into New York city. It will be equipped to carry two tracks for subway trains,

FINDS INTEREST STRONG

Competing Engineers See Some-

thing to Look At, Says

Harry S. Houpt.

sier motor by competing engineers," says

Harry S. Houpt, "is a pretty good indica-

tion that we have something good. These

numbers that the low price is possible I

IN NEW LOZIER MOTOR Atax-Grieb Rubber Co com......

rentlemen scrutinize a power plant some- Kelly-Springfield Tire Co pf......

tention than the mountain climbing type Maxwell Motor Co 2d pf ...

"By building the new light four in such numbers that the low price is possible I white Co pf. ... white Co p

e that is respected by our competitors. Pecriess Motor Co of

practically hand built and naturally in small numbers. With the advent of the new light four also comes a new policy of production which places it in the very desirable \$2,000 class. That this policy is right is shown by the sales made since the first of the year.

The huilding the new light four in such process of the first of the pear.

The huilding the new light four in such process of the first of the year.

"Heretofore the Lozier has been more Petrless Motor Co comor less an exclusive quality proposition Pope Manufacturing Co com-

systems connecting with The Bronx, and this section will be practically developed before this Hudson River bridge could be completed. The cost of the bridge has been closely estimated to be \$42,000,000, and while this av first sight would appear to be a large sum it does not so appear when it is remembered that the city of New York has spent approximately \$100,000,000 to connect Manhattan with Long Island and that the development of the sections connected have amply repaid the expenditure. systems connecting with The Bronx, and

back its half of the cost in the increase value of lands and the consequent increase the tax returns, and the city of New York will recover its expenditure from the money spent here by the great population this bridge will promptly bring.

this bridge will promptly bring.

"The past century has been largely devoted to the development of rallways and rallway transportation," said Mr. Snyder in outlining the tunnel proposition, "diverting from the highways a large amount of traffic and tending to check the development of highway improvements. With the development of motor driven vehicles there is a return to the highway which necessitates that transportation by highways be continuous and uninterrupted

there is a return to the highway which necessitates that transportation by highways be continuous and uninterrupted and lead to the need of bridges or tunnels for crossing water obstructions.

"In the case of the Hudson River, to build a bridge without intermediate piers in the centre of the channel would necessitate a span of 2,800 feet. The largest bridges already in existence are the Forth bridge, with a 1,700 foot span, and the Quebec bridge, with a span of 1,800 feet (both cantilever bridges), while the longest suspension type is the Williamsburg bridge, with a span of 1,600 feet. It will thus be seen that conditions are favorable to a bridge in the northerly part of Manhattan at any point from Fiftleth street north and favor tunnels in the lower end of the island.

"A tunnel at Canal street would be well placed for continuous routes with the existing bridges over the East River and with the existing highways connecting the towns on the western side of the Hudson. A bridge located at about Fifty-eighth or Fifty-ninth street would also be favorable to a continuous route to Long Island City over the Queenshop bridge.

or Fifty-ninth street would also be lavorable to a continuous route to Long Island City over the Queensboro bridge.

"One advantage of a tunnel over a fixed bridge is the shorter approaches necessary, as the floor of a tunnel at the deepest point can be placed at not over ninety feet below the surface of the water, while the floor of a bridge should be from 150 to 200 feet above water. highway system of the State is practically all west of the Hudson River it is the manifest duty of the State to link up the highway system with the streets of New Tork, and that can now be done with New Jersey paying half the expense of such a link."

"Of the \$50,000,000 recently appropriated for highway improvement in the State of New York the city is contributing approximately 75 per cent. and receiving suggested can be built for about \$11,-000,000.

Such a pair of tubes at the location suggested can be built for about \$11,-000,000.

"The highway tunnels in London—the

suggested can be built for about \$11,000,000.

"The highway tunnels in London—the Blackwall and the Rotherhithe—are both successful and accommodate about 1,000,000 vehicles per annum. There is a tunnel under the harbor at Glasgow, Scotland, having two tubes for vehicles and third for nedestrians. Access to this land, having two tubes for venicles and a third for pedestrians. Access to this tunnel is by means of elevators and shafts, as is the case with the highway tunnel under the Eibe at Hamburg.

"The capacity of the tunnels proposed would be about 5,000,000 each per annum—about 10 per cent. of the total daily traffic, this figure being based on the maximum hour traffic.

AUTOMOBILE SECURITIES.

General Motors Co pf......

International Motor Co com... International Motor Co pf.... Kelly-Springfield Tire Co com...

Firestone Tire and Rubber Co com ... 284
Firestone Tire and Rubber Co pf 1089

B F Goodrich Co com...... 2214 231

Cold but the Hudson Makes Its Journey Through



A photograph sent in by the Freeman Company, Hudson distributers at Edmonton, Alberta, shows Hudson car which made an 800 mile trip to Peace River Crossing standing on the ice of Lesser Slave Lake. The five men who made the trip are shown engaged in catching fish through the ice. An interesting bit of detail was that the ear stood outdoors—of course—each night during the trip. The radiator was filled with kerosene instead of water, because frequently the thermometer was 15 below sero. Yet the electric self-cranker never falled to start the car.

Packards Are at Work in Mexico

JULIO MADERO, a brother of the late President of Mexico, recently gave a Packard six cylinder car to Gen. Obregon, commander of the northern division of Carranza's troops. Madero bought the car from the Packard dealer in Phoenix, Ariz. Gen. Pancho Villa also uses a Fackard. The tonneau of the touring body has been equipped with special auxiliary seats for members of the staff.

More than fifty Packard vehicles are operated by the Federal Government in Mexico. The roads in Mexico are notoriously bad, however.

SOLD CARS AT BOSTON.

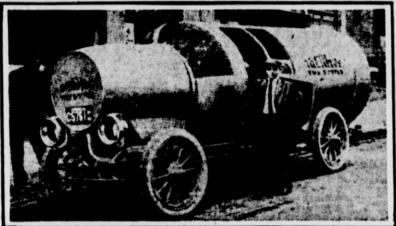
More Than Expected Marketed at Boston, Sava McCausland.

"The sale of KisselKars at the Boston show, which by the way surpassed New York and Chicago in the number of exhibitors, was far and away beyond expectations," says C. H. McCausland "Not only were many dealers added to the New England representation, but a great number of retail sales were closed. "This situation is fairly typical of the interest in this year's KisselKar models

throughout the country. I think this is largely due to the fact that there is nothing experimental, no mechanical innova-tions not yet proved practicable." COMFORT IS THE ISSUE.

Moline-Knight Has Features signed to This End,

"Comfort for the driver has been a paramount issue in designing the Moline-



"Bottle Car" Uses Republic Shoes

Thermos bottle, which visited cities all through the East the past two years. It is shod all round with Republic Staggards, which the driver says gave fine service.

GEAR SHIFT BY "WIRE." Knight," says J. W.

as Great Improvement. "When it was announced that the electromagnet was successfully applied to shifting gears on the Haynes," says E. W. Headington, manager of the Haynes New York branch, "the motoring public were naturally quick to grasp its advantages and before long the electric gear shift was heralded as the greatest

automobile improvement in recent years.

Electric Change Speed Is Regarded

"On the Haynes steering wheel there is a dial of push buttons called the 'selector' switch. These buttons control the operation of a set of electromagnets, one for each speed and one for reverse. To the clutch pedal is connected a small mechanical master switch which completes the circuit to the battery for energizing the electromagnets.

'To shift gears you select the desired speed through the 'selector' switch, com-plete the circuit by depressing the clutch pedal and the instant it is released the gears are shifted so that there is no pos-sibility of stripping a gear or wrecking a

transmission. "After you understand the mechanical construction of the electric gear shifting mechanism you marvel at its simplicity and wonder why it was not perfected long ago. As a matter of fact engineers have been working on this device for a periol of six years, before the Haynes company finally decided to adopt it as standard

York representative for this car. The ing a record of all happenings of moment front part of the body has pienty of leg affecting the tire wear during the test and of the mileage covered by each tire during its useful life. The Pennsylvania sufficient height to make riding comforta- Rubber Company applied to the club to ble; the three centre control levers are make the test. of a length that can be manipulated handily, the foot pedals are adjustable to suit varying leg measurements, the speed-

ments are so arranged that they are readily discernible and at night are !!lum!nated by an electric light. elliptic front and rear springs of unusual length, pockets on both front doors, tool box under the front seat, two cylinder tire pump and other driver comforts, the man behind the wheel is as comfortable

Trade Doings in Motor Car World

Col. K. C. Pardee, for many years promihe past year he has been handling the he saw fit. Havers cars in the metropolitan terri-

The Havers sales agency and service The Havers sales agency and service department will be run by Walter K. Hadley Company, at 1860 Broadway, as usual. Hadley is the general sales manager of the Havers Motor Car Company of Part Havers Motor Car Company of Port Huron, Mich., the manufacturers of the Havers Six. In the future he will make his headquarters in New York.

The F. T. Sanford Automobile Company The F. T. Sanford Automobile Company has taken over the representation of Kelly Springfield motor trucks for New York State, New Jersey and Connecticut. The new company is being formed with Francis T. Sanford as president. Local agents are being appointed in the principal towns and cities of the States named,

After a service of more than twenty After a service of more than twenty years in charge of the Studebaker interests in the Inter-Mountain territory Charles A. Quigley has resigned as manager of the Sait Lake branch and has taken a distributing contract for the Studebaker automobile line for the entire region.

Arthur Waterman, who has been made general manager and vice-president of the Hartford Suspension Company, was con-nected for years with this same com-

TO SHOW HOW WHEELS AFFECT WEAR OF TIRES

Official A. C. A. Test Will Use Both Wire and Wooden Wheels.

laboratory of the Automobile Club of America will shortly be undertaken with a view to showing the relative effect of wooden and wire wheels upon the wear of two sets of Pennsylvania tires. One set of tires is to be fitted to a four cylinder 1914 Lozier car, equipped with the wooden wheels regularly furnished by the manufacturers, and the second set is to be fitted to a second car which will be a duplicate of the first in all particu-lars except the wheels, which will be probably Rudge-Whitworth type.

These two cars will be driven an aver-age of about 125 miles a day for a period of several weeks. Each car will be con-tinually in charge of an official observer, acting under the direction of the clubs technical committee and Mr. Chase, en-gineer for the club. The cars will report gineer for the club. The cars will report at the club each night, where they will remain under lock and key after being properly cleaned and prepared for the next day's trip. Both cars will cover a certain route each day, one leading and the other following immediately behind, over exactly the same route and at the same steed. same speed.

The next day the cars will travel the same course, but the one which followed on the first day will lead, while the leader on the first day will follow. The drivers will also be interchanged, so that the man who drove the car with the wooden whees on the first day will drive the wire wheeled car on the second day. On many days of these trips the cars will carry a full complement of passengers, or equivalent ballast, but the number of passengers will be changed from time to time. so that the conditions under which the car is operated will approximate as nearly as possible the actual conditions under which the average car is operated in normal use.

Careful note and the conditions of the spot. The car, which has a long wheelbase, was painted green and Mrs. Edeson at once christened it the "Long Green," a name by which it has been known ever since.

As a direct

MAIL MAN DEFIES THEM.

ometer, clock, gauges and other instru- Says He'll Motor on Nantucket Island. Whether or No.

"With these features, together with a push button at the top of the steering post for sounding the electric horn, half provided." A merry legal war is occupying the attention of the courts simply be-cause Clinton S. Folger, a mail carrier, likes motoring.

The trouble, in which Folger has thus ar been victorious, dates back several as though he was resting in a Turkish rocker at home or at the club." months to the time when the mail carrier bought a 1914 model Overland touring car in Boston. Although automobiles have been rigorously denied admission to the island, Mr. Folger brought his new pur-chase home and has since, with the exception of the time he has spent in court been delivering mail in it. The officials of the island were much wrought up when Citizen Folger transgressed by introduc ing his gasolene car in the hitherto sacred precints. They remonstrated with the col. K. C. Pardee, for many years prominently identified with the automobile trade in New York, has announced his retirement on account of failing health. For

Seeing that words were useless, a big delegation of Nantucket citizens travelled to Boston and had the Massachusetts Highway Commission pass an exclusion law prohibiting the use of motor cars on the island. But Folger kept right on driving his Overland. Then the island officials put their heads together and decided to ask for an injunction. But there was nothing doing. The injunction was refused. Another conference, and the Selectmen cited Folger into court. He was fined \$15 for violating the exclusion

act, but immediately appealed.

The next sitting of the Superior Court for the district is in July, so Folger, with a forgiving smile for his opponents, climbed into his car and started it off again. Be fore starting on his mail route, however, Mr. Folger announced that he would see the case through to the end, promising

to take it to the Federal Supreme Court at Washington if such procedure required ten years. Meanwhile, he announced, he would continue to drive his car.

Though a considerable amount of ill feeling has been stirred up by the case Folger is in no way vindictive, for on the day he was cited to appear in court he gaye one of the Selectmen a ride and he gave one of the Selectmen a ride and after the trial took Chief of Police Gibbs on a little joy ride to Siasconset. The Selectmen have decided that about the only way to get Folger's Overland off the island is to capture it some dark night and dump it overboard where the water is deep.

nected for years with this same company until about a year ago, when he took charge of another manufacturing enterprise. This company is the pioneer of the shock absorber business. Edward V. Hartford, president of the company, was one of the first to realize the need of a device to control the action of the springs to insure easy riding.

Waterman has been with him from the time the device was first on the market as manager of the sales and advertising departments. Marketing a shock absorber was not an easy task years ago. The automobile owner of to-day almost takes it for granted that a shock absorber is necessary, but in those days he first had to be educated to the fact that he needed them and then had to be sold.

Acting the tocapture it some dark night and dump it overboard where the water is deep.

Firestone Makes Cycle Tires.

Recognizing the cycle car and the importance of the motorcycle industry, the Firestone Tire and Rubber Company hereafter will market cycle tires. The tires will be in four sizes, 28x2½, 29x2½, 28x-2½ and may be had with either the Firestone non-skid tread or a new corrugated tread. Red as well as gray tubes will be made to it all sizes. The company is manufacturing the tires after two years of experimenting and submitting the new product to actual read tests in and about Akron.

BUICK PLANT ONE OF "MAGNIFICENT DISTANCES"

Takes a Couple of Days at Least to See All There Is to This Factory

To see the Bulck plant at Flint properly means a couple of days at lesst. That is the impression got from putting in several hours wandering through shop after shop and then being told that only a tiny part of the plant had been covered. Almost every one interested in automobiles has heard that the Bulck has the largest single plant in this country, or the world for that matter. This is estimated at something like \$1.000,000.

It takes seeing to prove this is so, worth the two and a half hour tried to the great single plant in this country, or the world for that matter. The lit takes seeing to prove this is so, worth the two and a half hour tried to the great single plant in this country. The world of the Bulck care tried having visited Flint—which the Bulck is the biggest builder of cars in the country. Its total of \$2,900 passenger cars for 1914 isn't the greatest by many cars. But it's the factory and the organization that dose it which earns attention.

Fint is a town of 45,000 inhabitants, which owes most of its importance to the Bulck. That concern employs 5,000 men and has a payroll of \$405,816 a month. The floor space is fifty-eight acres, and the entire grounds cover something like 169 acres. The output is 165 motor cars a day.

A visitor to the plant is shown through a labyrinh of belts, machinery and men, huge forge hammers, with men bare to the wast, gear cutters, stock rooms and warehouses. He sees the Bulck in all stages of deshabilic.

The facts give the best idea of the scale on which the business is run: First, there is the \$5,000,000 a year paid to the great army of wage earners. If the company puts out 150 cars a day it means \$17,250 that day, and every day, for tires, approximately \$5,175,000 a year.

The motors for the same output cost station to the next. It is estimated this method saves the company around \$100,000 a year. There are twenty-twenty paint, \$2,450 a day, and so on down the shire line.

Two million rine hundred and seventy-three thousand three hundred square feet of leather go

Ford Makes 24,000 Cars in February

MORE than 1,000 completed automobiles a day for twenty-four consecutive working days was the new record hung up in February by the Ford Mctor Company. This shattered all previous production records of the company. In this short month 24,621 Model Ts were built and shipped. This excelled the menth of January, itself a record smasher, in which 23,936 Model Ts were built and shipped to branches and agents throughout the world.

The company in February set a new high water mark for a day's production of automobiles. On the 27th it turned out 1,636 complete Fords. The previous record was made one day last Spring, more than 1,300 cars.

EDESON IN AUTO BUSINESS.

Actor Takes the Oakland Car for His Side Line.

As a direct result of his purchase Robert Edeson has entered into negotiations with the Sidney B. Bowman Company, local distributers for the Oakland agency at Sag Harbor, L. I. He is building a \$30,000 arranged by the club giving a record of all happenings of moment.

As a direct result of his purchase Robert Edeson has entered into negotiations of the replies were excellent and told the story of intelligent tire care better than the company itself could have advised.

"I always put new tires on my rear tion. It is planned that the garage will be opened May 1, after Mr. Edeson has be opened May 1. after Mr. Edeson has rear tires to the front wheels, completed his Eastern engagements. completed his Eastern engagements.

New Band for Retreading.

a new band for retreading worn out tires some time ago. Formed after mechanical ideas it has the most effective principle and design against skidding. A series of their individual preferences as to tires cogs divided by a narrow strip of soft rubber in the centre of the band help to make this non-skid effect a truly remark-The island of Nantucket, off the coast of Massachusetts, is in a furore these days because of what is regarded as a daring violation of "the statutes made and breaker strip forms a solid unit with the

TIRE SATISFACTION IS LARGELY OWNERS' WORK

Attention Given to Casings Is the Reason for Their Doing Good Mileage.

The Goodyear Tire and Rubber Com

pany insists that tire satisfaction, tire mileage and consequent low cost by the mile depend as much on the attention given their tires by car owners as upon any other one thing. "It is almost unbelievable, yet true," says F. A. Henderson head of the Goodyear adjusting depart ment, "that many men who watch their engines minutely, who listen for the slightest unusual click or hum in the gears, never think of giving their tires attention. Yet the tires, made of cotto fabric and rubber, have to sustain an build a cushioned road for what is pra tically a small locomotive turned loose of city streets and country roads. In st a condition it is surprising, not that the are tire troubles, but that tires performed the condition in the

anything like the service they do."
Recently the Goodyear company sent out a number of letters to car owners who had obtained unusual mileage from who had obtained unusual mileage from their tires. The letters stated speci-fically that the company was not askira for any special "glorification" of Goodyear tires, but wanted to obtain the ideas of fortunate tire users on the care of tires-for the benefit of the whole motoring public

ways carry an extra tire, and as soon a tire was cut I put on the spare one had the injured tire repaired. In The Miller Rubber Company introduced way I got 12,000 miles out of one set

Saxon and Chandler Are Members The Saxon Motor Car Company of troit and the Chandler Motor Car Co the pany of Cleveland have been elected to membership in the National Automobile Chamber of Commerce.

THIS IS THE



PISTON RING of which automobile, motor cycle and motor

boat owners are all talking. The ring you've read about-that your repair man or garage man has told you you ought to install

To Increase Your Power

Now-this minute-make a note on paper (don't trust to memory) that before your car gets out of the garage or the shop it is going to be equipped with Leak-Proof Piston Rings. You'll think you've got a new engine-perfect compression and all the power there is in the motor.

This is a two-piece ring. The two sections are interlocking, concentric and with opposing points of expansion. Tension is thus equally created and equally applied, giving perfect bearing on cylinder wall. The opening in each section is sealed by the closely fitting flange of the other (see cut)—gas leakage is a mechanical impossibility—oil can't work up and cause carbonization. Constructed on the angle-iron work up and cause carbonization. Constructed on the angle-iron principle—this means strength. Made of Processed Gray Iron—smooth,

tough and elastic.

There never was a one-piece ring that was gas-tight, this one isthere never was any ring of one or more pieces that was so simple, sure, strong and efficient as the "Leak-Proof" ring. Any size—easily adjustable.

"Ask The User" In Use on Over 200,000

Automobiles PISTON HEAD PACKING RINGS and Motor Boats

repair shops The following Supply Houses are Distribe

Installed by

all garages

New York City, Love Motor Supplies Co., 1727 Broadway, Chas. E. Miller, 97 Read St., Crane & Stendicke,

American AutoSupplyCo., 1741 Broadway. Deckiya, Julius Bindrim. Whitestone, L. L. W. W. Balch. Albany, N. Y., Albany, N. Y.,

McQuay-Norris Mfg. Co., St. Louis, Mo. There's no look proof ring but the Lean Proof Ring - insist



Here's a Marmon a Dozen Years Old

This 1902 Marmon appeared recently in a trade parade in Indianapolis. It is quite a contrast in beauty and performance to the latest Marmon models Frank Carrie is showing at his newly opened store at 1858 Broadway.